



ISUZU D-MAX RG MY2021 ONWARDS REAR BAR

IMPORTANT! – READ BEFORE INSTALLATION

- When installed in accordance with these instructions, the rear protection tow bar maintains the factory tow rating of your vehicle.
- This product must be installed exactly as per these instructions using only hardware supplied.
- Take a few moments to read instructions thoroughly before beginning work.
- In the event of damage to any bar component please contact OFFROAD ANIMAL to arrange repair/replacement of components.
- Do not use this product for any vehicle make or model other than that specified on these instructions.
- Do not remove labels from this product.
- This product and its fixings must not be modified in any way unless stated in these fitting instructions.
- The installation of this product is recommended for trained personnel.
- These instructions are correct at time of publication. OFFROAD ANIMAL cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer. If you find something has changed please contact us to let us know!
- During installation it is the duty of the installer to check correct operation/clearances of all components.
- If Instructions are to be printed for reference in the workshop, it is recommended that they are printed in colour, for best legibility.

GENERAL CARE AND MAINTENANCE

Only wash the product with a PH neutral car wash to prevent paint damage and discolouration.

Plastic parts may be maintained with silicone spray.

Do not use acidic or alkaline based cleaning products.

It is important to perform regular checks (pre trip or on an annual basis) on the installed product. Checks include:

- Visual inspection for damage (eg. cracks, chips, dents etc.)
- Electrical wiring is not rubbing anything or worn out
- Bolts are torqued to correct specification (see torque guide below)

For touching up small stone chips, Offroad Animal recommends the following paint products:

- Dupli-Color Trim & Bumper Paint Black (TB101)
- VHT Hood, Bumper & Trim Paint Black (SP27)

BOLT TORQUE SETTINGS

Use the following bolt torques on all general fasteners, unless otherwise specified.

GENERAL FASTENERS	
Size	Torque Nm
M5	5 Nm
M6	9 Nm
M8	22 Nm
M10	44 Nm
M12	77 Nm

Use the following bolt torques on all structural front bar mount and tow point fasteners, and rear towbar fasteners, unless otherwise specified.

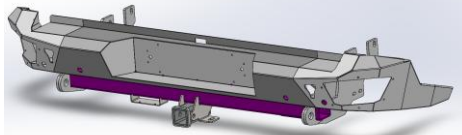
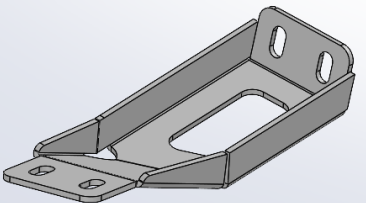
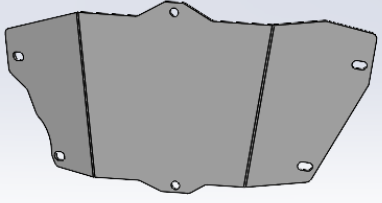
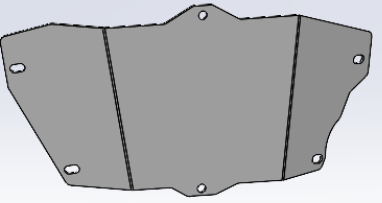
FRONT BAR MOUNTS AND TOW POINTS + REAR TOWBAR	
Size	Torque Nm
M10	57 Nm
M12	100 Nm
M14	164 Nm
M16	248 Nm

Always use a torque wrench to set correct torque settings. Ensure torque wrench is set to Nm unit of measurement. Otherwise perform conversion to lb-ft.

PARTS LISTING

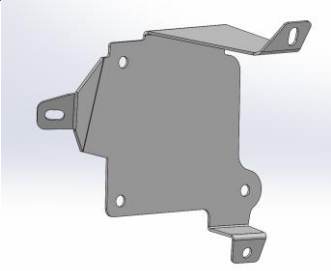
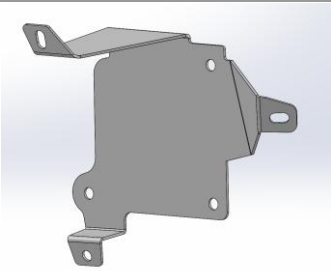
IMPORTANT: Check all parts are present before beginning work! Contact OFFROAD ANIMAL if something is missing.

Main Parts – In the Box

Qty	Part Number	Description	Image
1	RB-IDM-RG-21-ASM1	ISUZU DMAX RG 21+REAR BAR WELDMENT	
1	B-0518R	Isuzu DMAX 2021+ Rear Bar - Wing Support Bracket	
1	B-0518L	Isuzu DMAX 2021+ Rear Bar - Wing Support Bracket	
1	B-0544R	DMAX 21+ Rear Radar Cover Panel	
1	B-0544L	DMAX 21+ Rear Radar Cover Panel	

1	B-0576R	Isuzu DMAX 2021+ Rear Bar - Radar Bracket	
1	B-0576L	Isuzu DMAX 2021+ Rear Bar - Radar Bracket	
2	BR25B	LED NUMBER PLATE LIGHT	
2	PW-P-14x9-800	Pinch Weld - Plain Non Seal 800mm	
1	RB-IDM-RG-21-ADRCF	DMAX 21+ REAR BAR ADR COMPLIANCE PLATE	<p>MANUFACTURED BY OFFROAD ANIMAL ISUZU DMAX RG SERIES MY2021 ON PART NO: RB-IDM-RG-21-ASM0 TONGUE PART NO: RB-TBM-01 RATED TOW CAPACITY 3500KG MAX TOWBALL DOWN LOAD 350KG FOR TOWING PURPOSES ONLY</p> <p>MFG DATE: </p>

D-MAX MY23 Radar Upgrade Kit

Qty	Part Number	Description	Image
1	B-1066R	D-MAX MY23 Rear Radar Bracket	
1	B-1066L	D-MAX MY23 Rear Radar Bracket	
6	M6 X 16 HEX	M6X16 HEX BOLT, ZP, 8.8	-
6	M6 FLAT WASHER	M6 FW	-
6	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP	-

Small Parts – Contained in Small Parts Kit Bag

Qty	Part Number	Description
2	RB-IDM-RG-21-ASM2	DMAX / BT50 21+ Rear Bar Nut Plate Assy
10	M12 FW LHD	M12 FW Large Heavy Duty
6	M12X30X1.25	Bolt Hex, M12X30x1.25, GR8.8 ZP
4	M12X30	Bolt Hex, M12X30x1.75, GR8.8 ZP
8	M10 Flat Washer	M10 FW
4	M10X20 BHCS	SCREW, BUTTON HEAD CAP, M10X20X1.5 GR12.9 ZP
8	M10 FLANGE NUT	Flange Nut, M10x1.5 G8.8 ZP
4	M10 x 30	Bolt Hex, M10X30x[1.5], GR8.8 ZP
12	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP
12	M6 FLAT WASHER BLACK ZINC	M6 FW BLACK ZP
12	M6x16 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X16X1 GR12.9 BLACK ZP
1	M10 NUT	Hex Nut, M10x1.5 G8.8 ZP
1	M10 x 25	Bolt Hex, M10X25x[1.5], GR8.8 ZP
6	M5 FLANGE NUT	Flange Nut, M5x0.8 G8.8 ZP
6	M5X15 PAN	SCREW, PAN HEAD PHILLIPS, M5X15X0.8 GR4.6 ZP

TOOLS REQUIRED

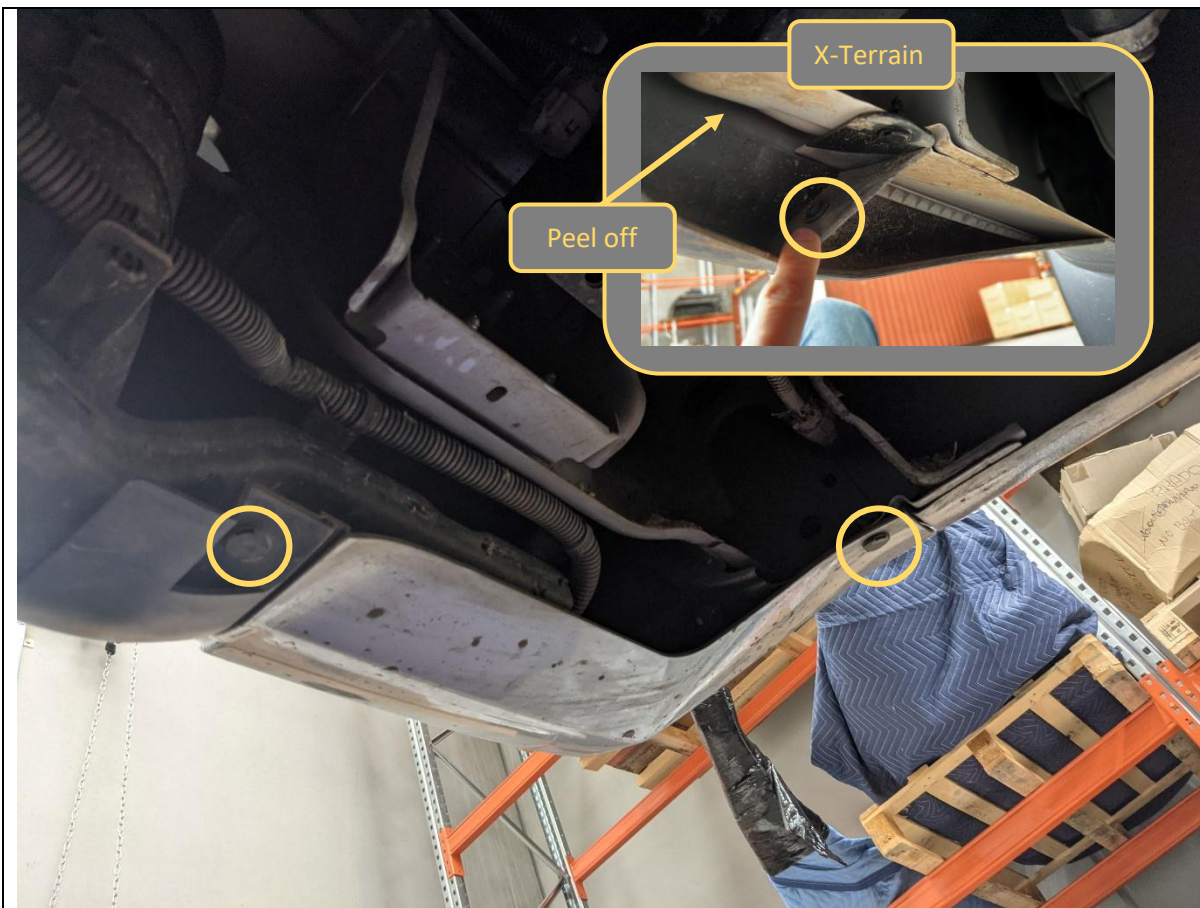
The following tools will be required to install the product.

Hand Tools	Power Tools	Workshop Equipment
Metric Socket Set 8-19mm Metric Spanner Set 8-19mm Hex (Allen) Key Set 4-8mm Trim Tool Utility Knife Side Cutters Wire Strippers	Soldering Iron Heat Gun Electric / Air Impact Driver (Optional but speeds up fitting process) Air Hacksaw or Reciprocating Saw	Lift Trolley Solder Heat Shrink Marker

WORKSHOP SAFETY

It is the responsibility of the installer to always complete works in a safe manner. Make sure the following safety equipment is available and precautions are observed whilst fitting this product.

<p>Hearing Protection</p> 	<p>Always wear ear protection when using power tools.</p>
<p>Eye Protection</p> 	<p>Ensure eye protection is always worn when cutting or drilling.</p>
<p>Manual Handling</p> 	<p>Do not attempt to lift bar assemblies or rock sliders on your own.</p> <p>Always use two people to lift or use mechanical Lifting aid such as hydraulic lifting trolley.</p>
<p>Vehicle Support</p> 	<p>Always ensure vehicle is properly supported when working on it. Do not attempt to fit products whilst suspension work is being carried out. Do not work under a vehicle supported only by a jack.</p>

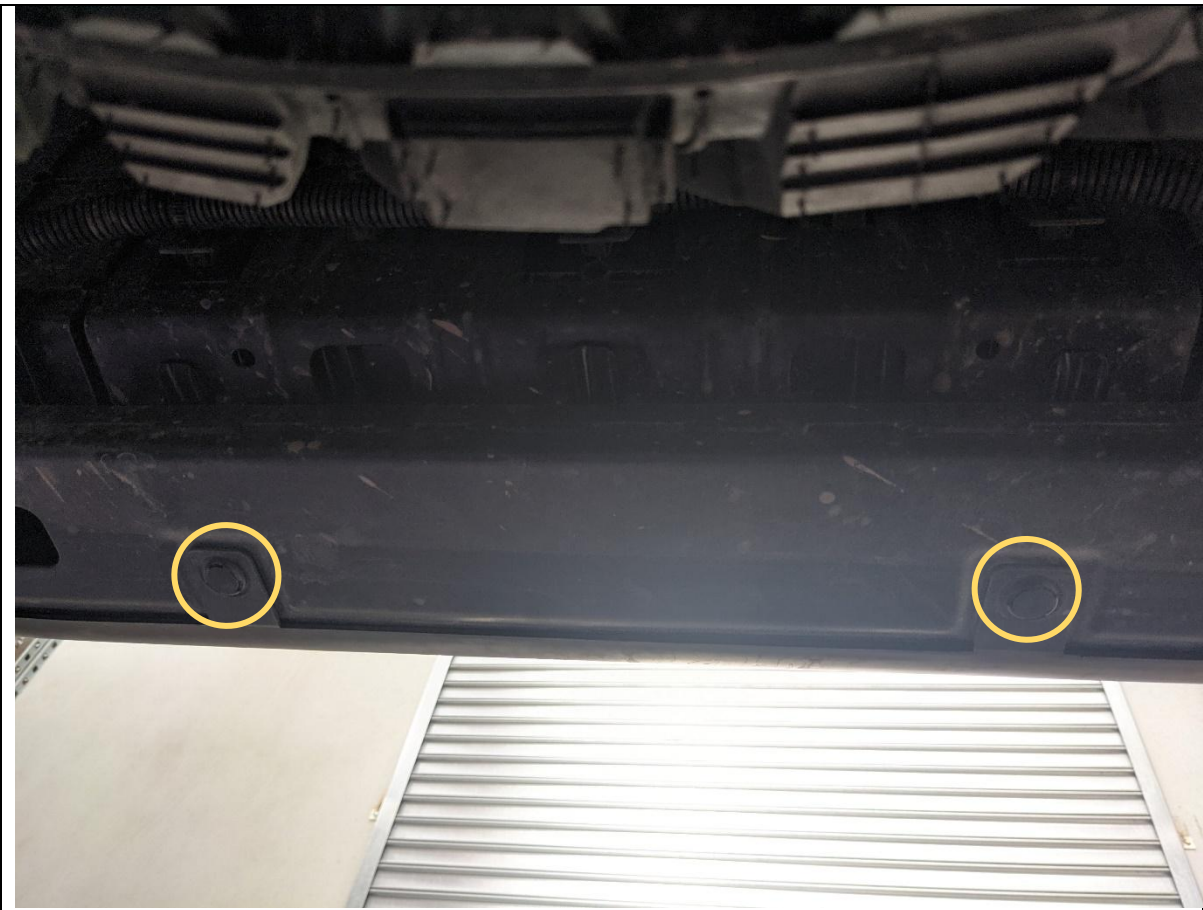


1. Before beginning work on the bumper, remove factory towbar if fitted. The vehicle used for this example did not have towbar fitted.
2. Remove the 2x Plastic clips from underside corner of rear bumper using trim tool. Complete for both sides.
3. X-Terrain models, remove fasteners securing the rear lower trim pieces, then remove trim pieces by peeling / cutting double side tape securing them to the bumper and tub.

TOOLS REQUIRED

Trim Tool

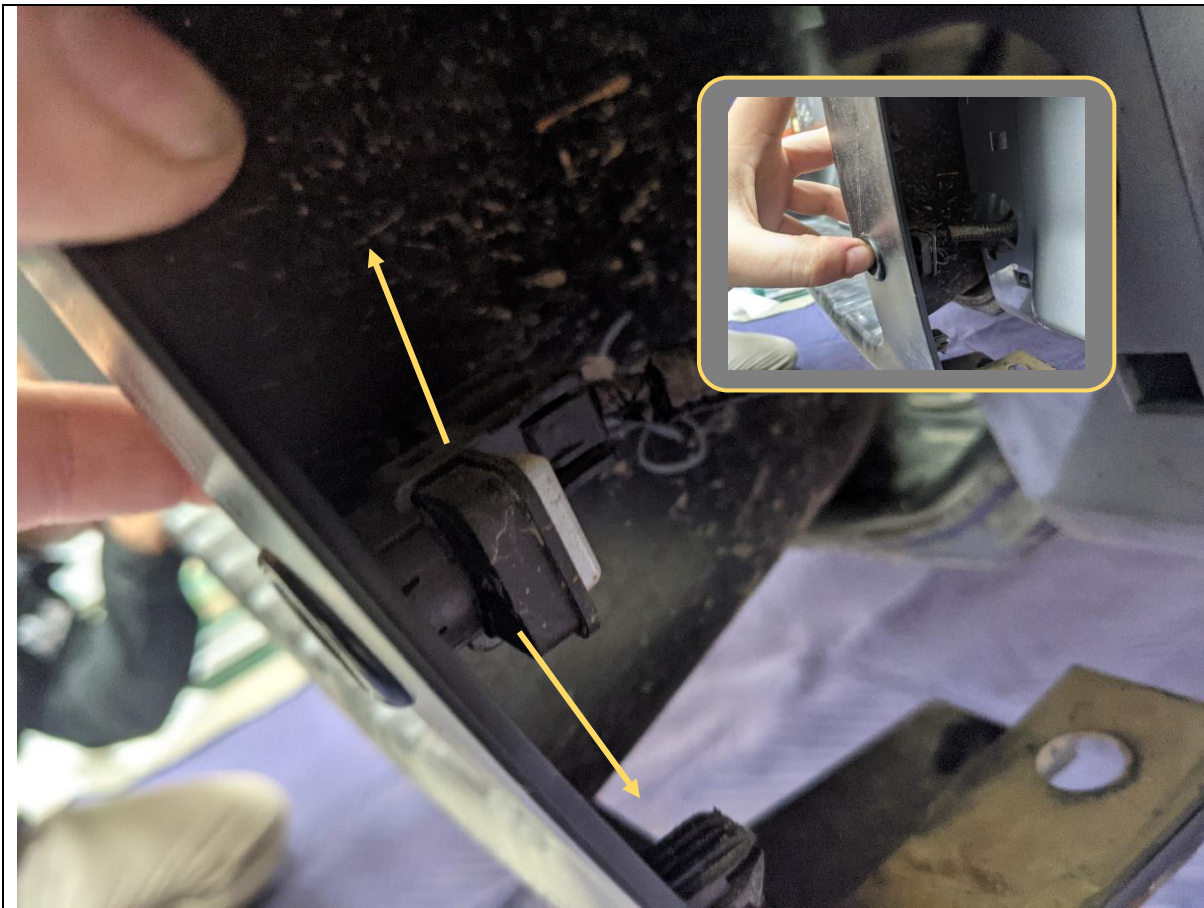
FASTENERS



<p>4. Remove the 2x Plastic clips from underside center of rear bumper using trim tool.</p>	<p>TOOLS REQUIRED</p> <p>Trim Tool</p>
	<p>FASTENERS</p>

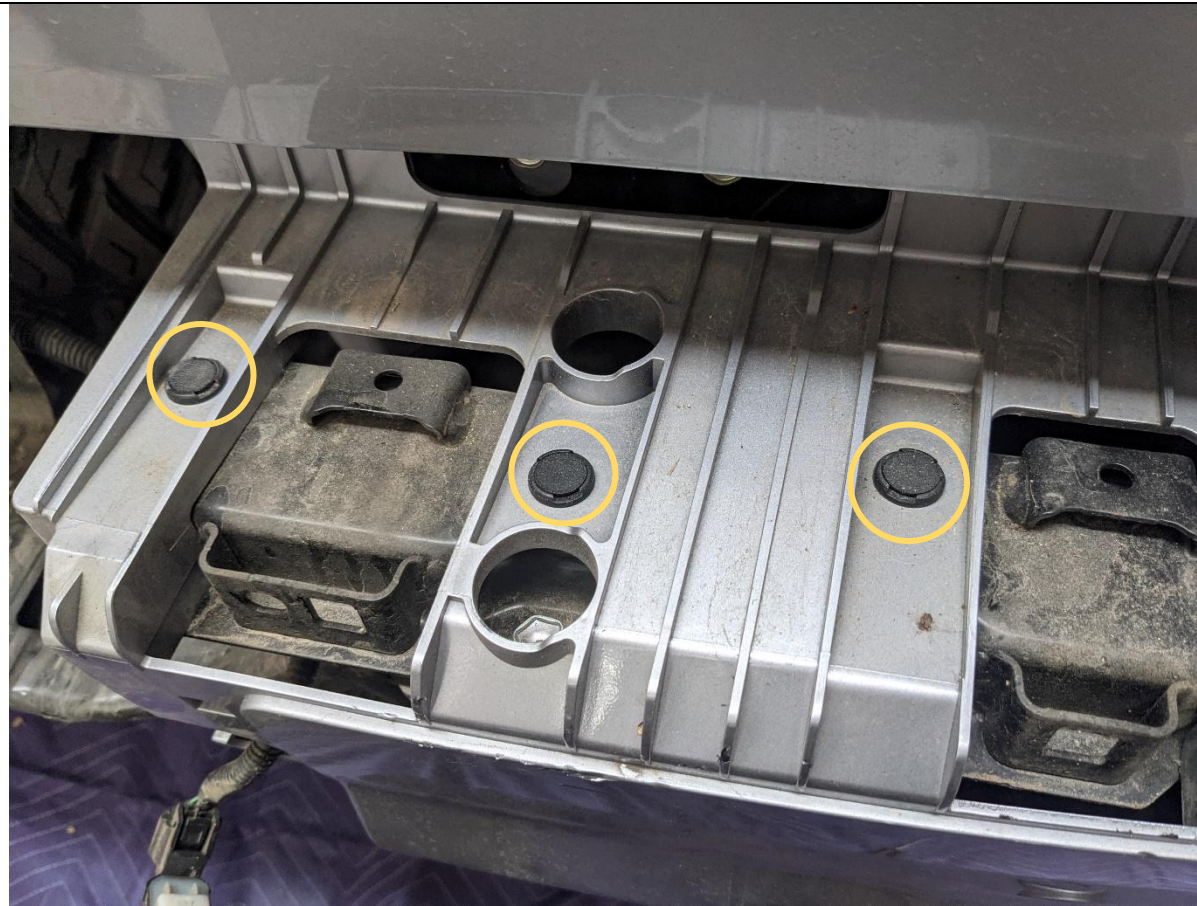


<div>5. Using trim tool pry away black plastic section of rear bumper to unseat it from the clips securing it to the colored outer sections.</div> <div>6. Pull the black center section partly away from the vehicle as shown.</div>	<div>TOOLS REQUIRED</div> <div>Trim Tool</div>
	<div>FASTENERS</div>



7. Remove the sensors from the housings in the center section loosened. Pry open the two retaining tabs holding the sensor in the housing then push the sensor through the bumper.

TOOLS REQUIRED**FASTENERS**



8. Remove the 3x Plastic clips securing the coloured outer bumper to the metal bumper support rail, using a trim tool

TOOLS REQUIRED

Trim Tool

FASTENERS



<div>9. Pull off the outer bumper section, starting from the bottom corner as shown.</div>	TOOLS REQUIRED
	FASTENERS



<p>10. Remove the sensors from the housings in the outer bumper section using same technique as before, Pry open the retaining tabs, then push sensor through.</p>	<p>TOOLS REQUIRED</p>
	<p>FASTENERS</p>



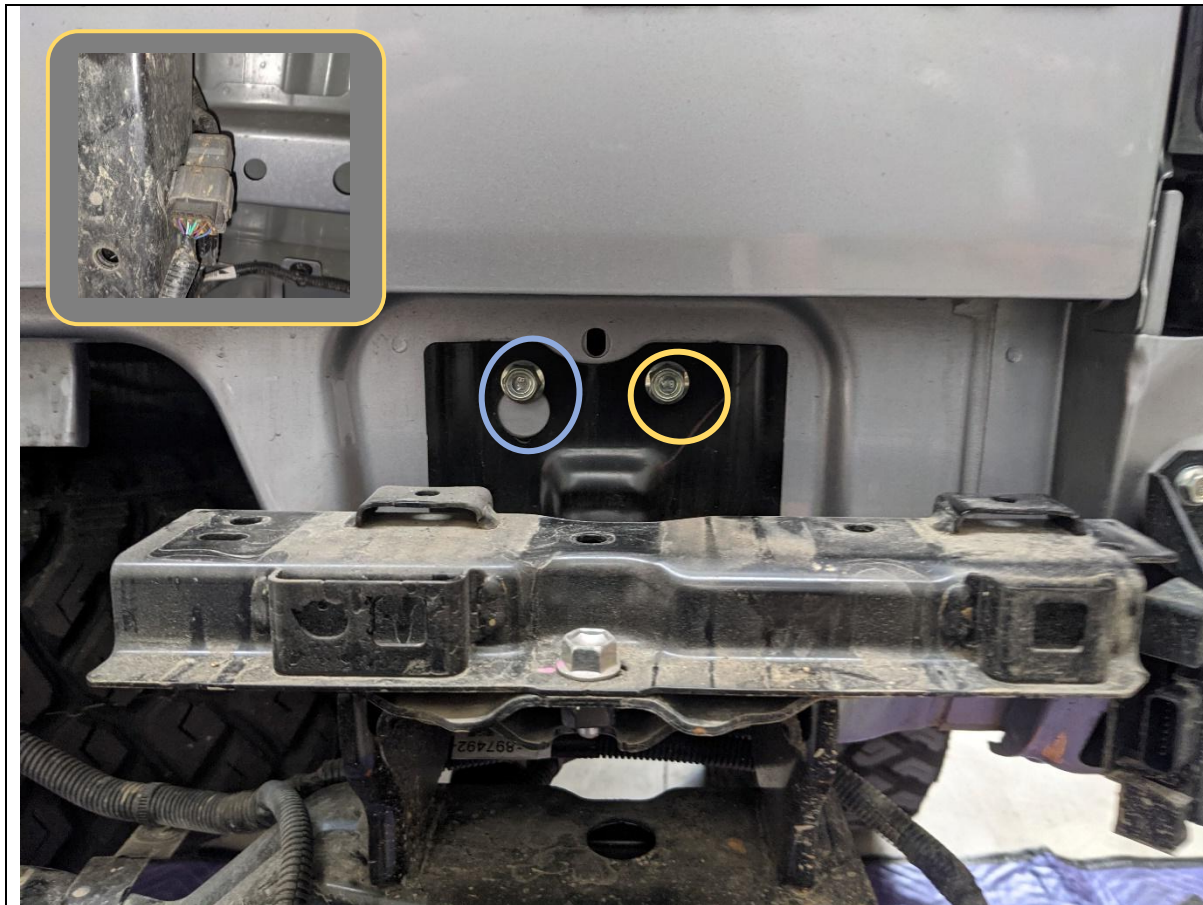
11. Disconnect the radar sensor wiring harness from the sensors at the connector.

2023 UPDATE: On some trim levels, the radar unit has been changed. The plug will be pointing downwards instead of inwards (see inset).

12. Complete on both sides of vehicle.

TOOLS REQUIRED

FASTENERS



13. Disconnect the main rear bar wiring harness from the vehicle at the connector located under the tub.
14. Remove all the Hex head bolts that secure the metal bumper beam to the tub, except the bolts on with the keyhole slots (Blue Circle)
15. Loosen the 2x Bolts with the keyhole slots (Blue Circle).

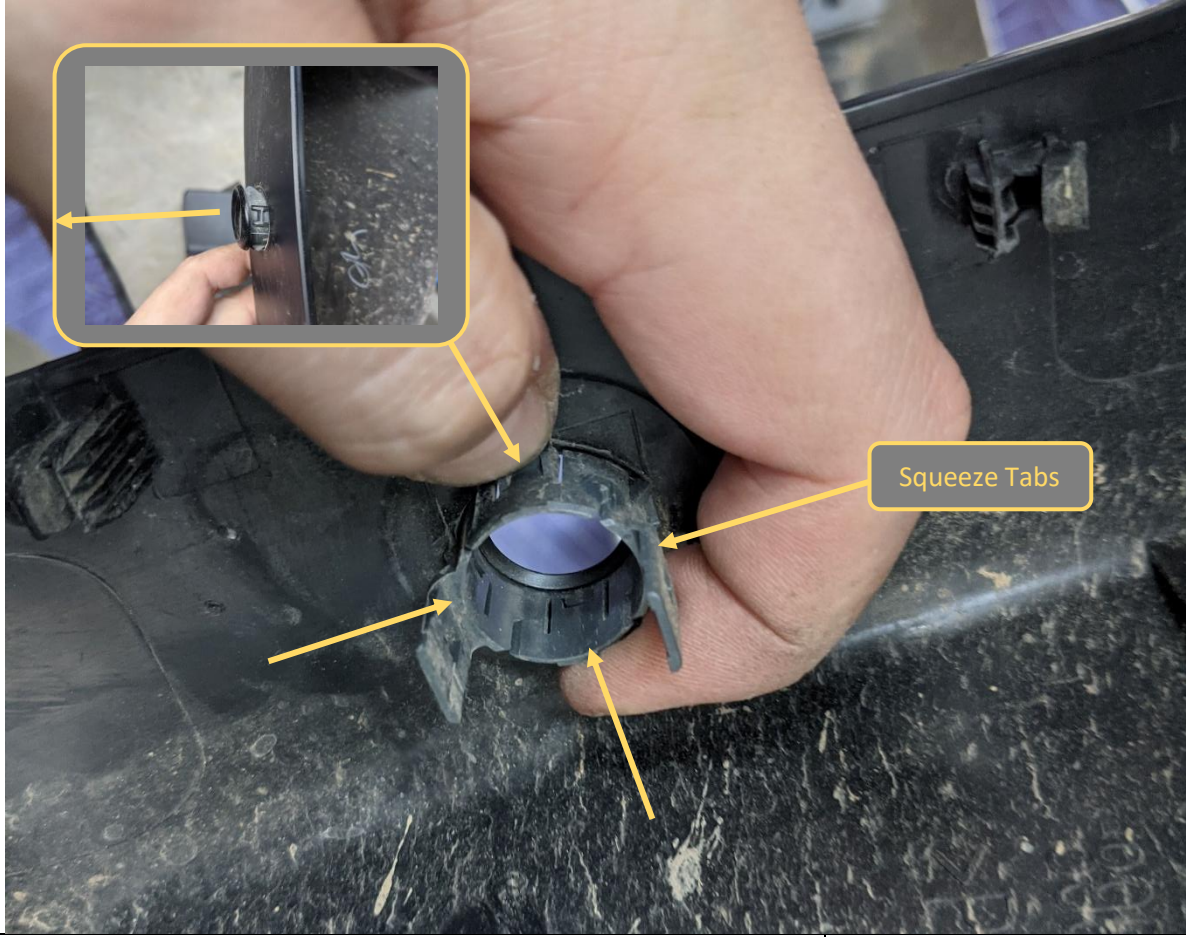
TOOLS REQUIRED

Socket / Spanner

FASTENERS



<div>16. Lift and remove the metal bumper beam from the vehicle.</div> <div>17. Remove the remaining hex bolts from the back of the tub.</div>	<div>TOOLS REQUIRED</div> <div>Socket / Spanner</div>
	<div>FASTENERS</div>

	
<p>18. Remove parking sensor housings, by squeezing the retaining tabs whilst pushing the housing forward through to the outside of the bumper.</p> <p>Take note of the housing orientation (there is a keying feature which can be used as reference)</p> <p>19. Repeat for all parking sensors in the bumper.</p> <p>20. Remove Bulbs from Number plate lamps.</p> <p>21. Remove number plate from original rear bar.</p>	TOOLS REQUIRED
	FASTENERS



22. Remove the main rear bar loom from the metal bumper beam, by unclipping harness connections with the trim tool.

TOOLS REQUIRED

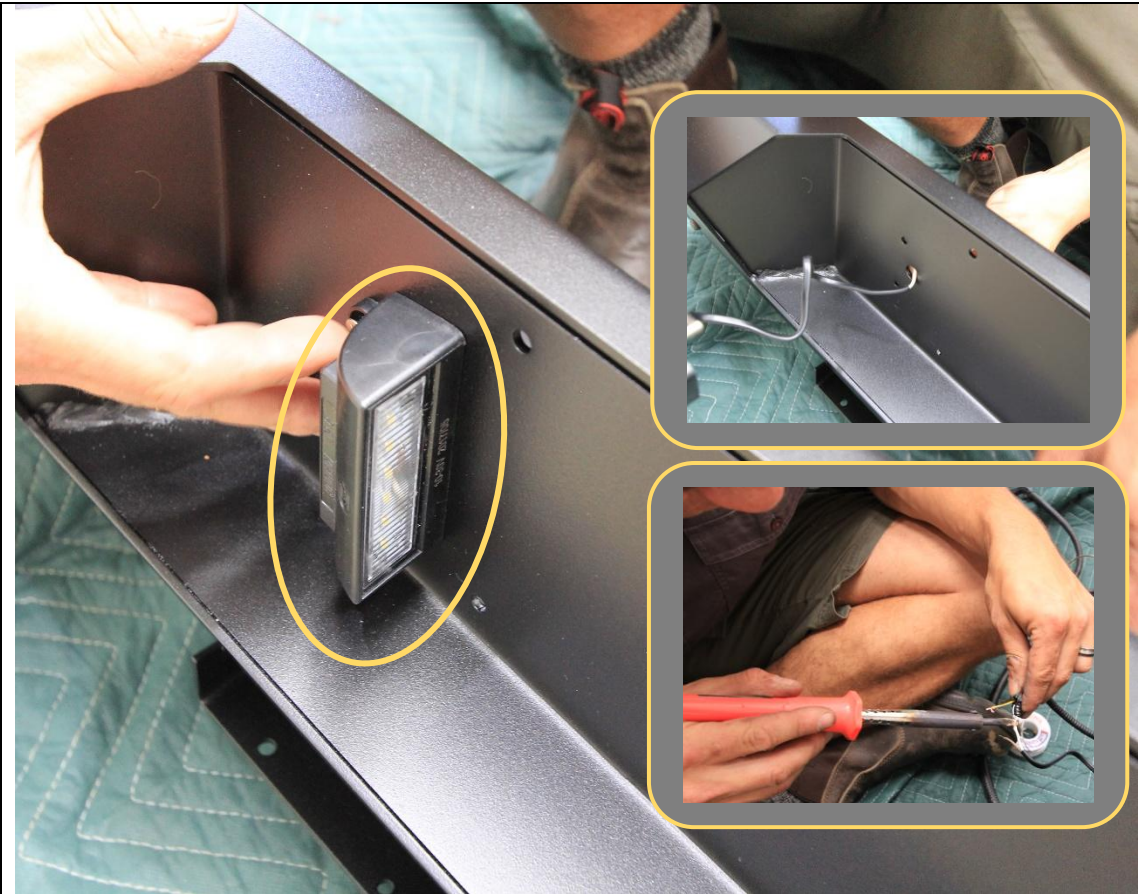
Trim Tool

FASTENERS



23. Fit the harness to the rear bar, routing the cables through the side arms so that the sensor wiring positions are in the correct locations. Ensure the correct orientation of the harness connectors is maintained.

TOOLS REQUIRED**FASTENERS**



<p>24. Fit the number plate lamps to the rear bar, by first feeding the cable the bar, then securing with screws and nuts supplied in the lamp box.</p> <p>25. Cut off lamp holders from the factory wiring.</p> <p>Note this is located on the tub under the tailgate, not in the bumper loom)</p> <p>26. Solder to new LED number plate lamp cables. Use heat shrink or electrical tape to insulate solder connections.</p> <p>27. Complete for both sides of vehicle.</p>	<p>TOOLS REQUIRED</p> <p>Soldering Iron Solder Heat Shrink / Gun Electrical Tape Side cutters Wire strippers</p> <p>FASTENERS</p> <p>Screws supplied with Lights</p>
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<p>28. Install parking sensor housings by inserting from rear of bar and pushing until sensors housings sit flush with the bar.</p> <p>29. Complete for all parking sensor locations on rear bar.</p>	<p>TOOLS REQUIRED</p>
	<p>FASTENERS</p>



30. Install sensors in housings by inserting into housing from rear of bar and pushing until audible "Click" is heard.

If the sensor will not go in all the way and click, the tabs on the sensor housing will need to be slightly shaved down with a sharp utility knife to create required clearance. Remove the housing from the bar to complete this if required.

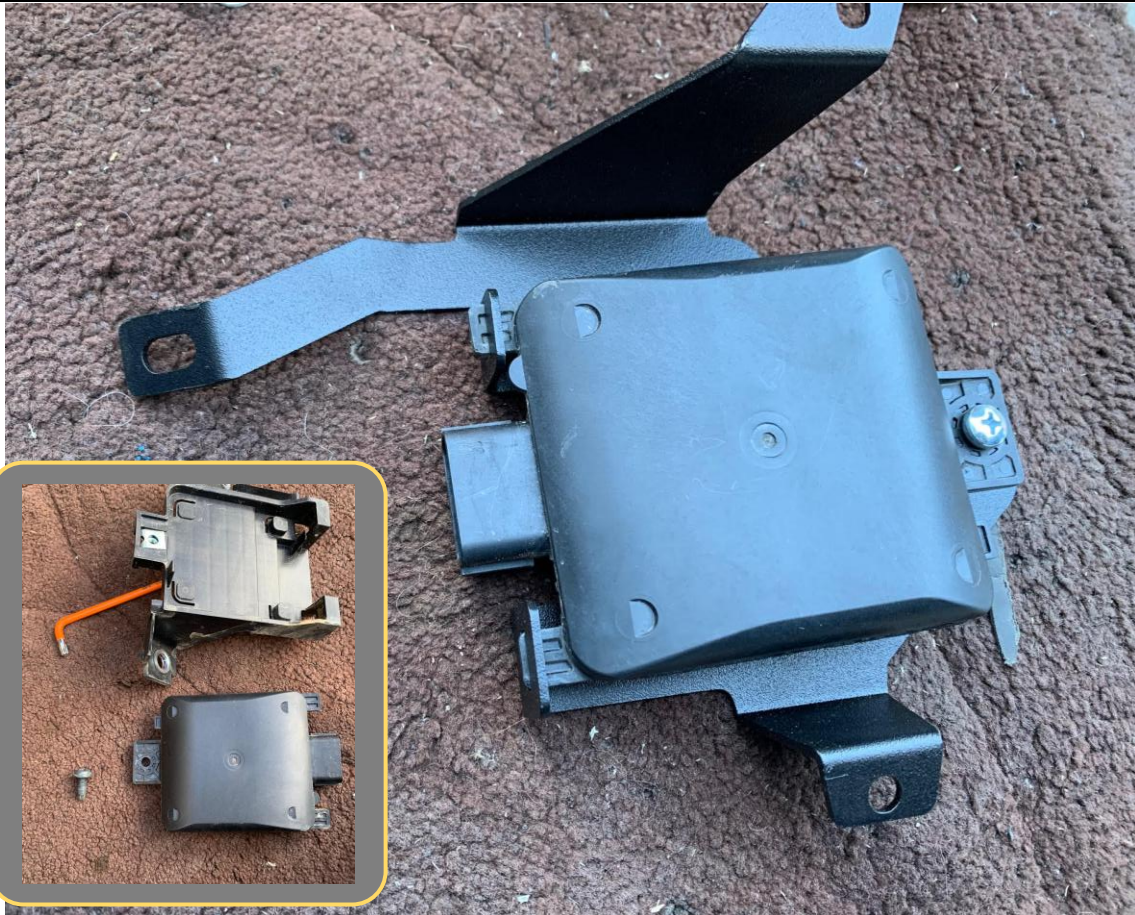
31. Plug in loom to sensors once seated.

32. Complete for both all sensors in bar.

TOOLS REQUIRED

Utility knife

FASTENERS



33. Remove rear radar sensors and their brackets from the tub, by removing Hex screws holding them in place.

2023 UPDATE: On some Isuzu D-MAX trim levels, the radar unit has been changed. If it appears different to the photo above, skip to the next page.

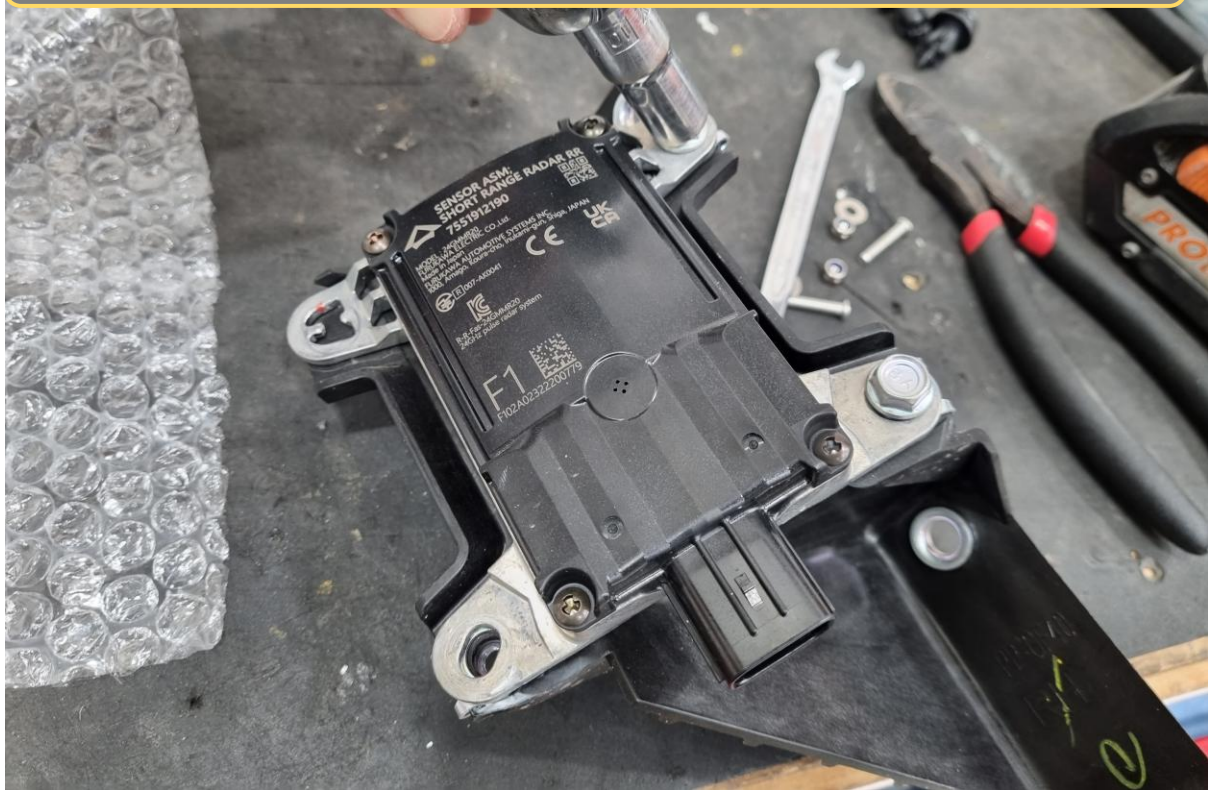
34. Remove the rear radar sensor from the plastic bracket by removing the TORX screw holding it in place.
35. Complete for both sides of vehicle.
36. Re-fit the radar sensors to the supplied rear bar radar bracket using the supplied M5 Fastener (driver RH side shown).

TOOLS REQUIRED

Torx Key
Phillips Head screwdriver
10mm socket/spanner

FASTENERS

M5x15 Pan head
M5 Flange Nut

UPDATED RADAR ON 2023+ ISUZU D-MAX ONLY

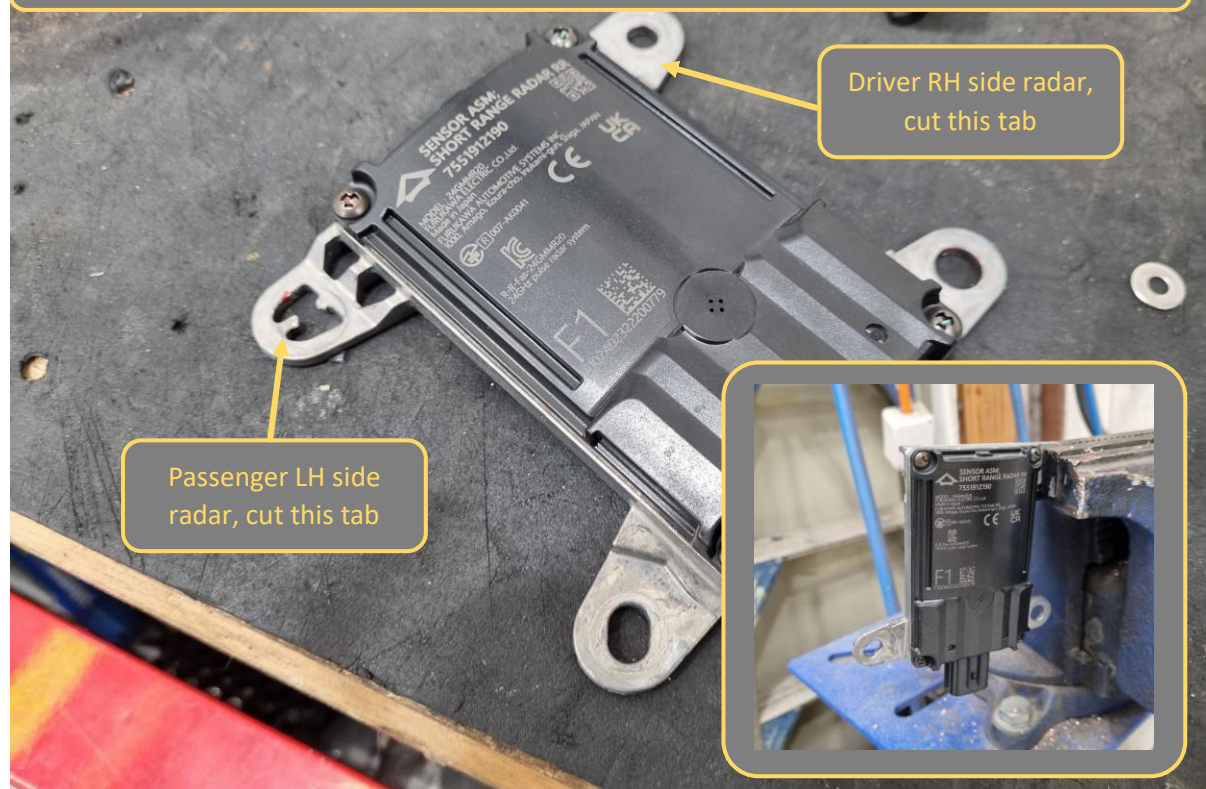
37. Remove the rear radar sensor from the plastic bracket by removing the 3x 10mm hex head bolts holding it in place.

38. Complete for both sides of vehicle.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

UPDATED RADAR ON 2023+ ISUZU D-MAX ONLY

39. Cut off 1x metal tab on the radar sensor with an angle grinder.

Different tabs need to be cut off for LH and RH radar sensors. See annotation above.

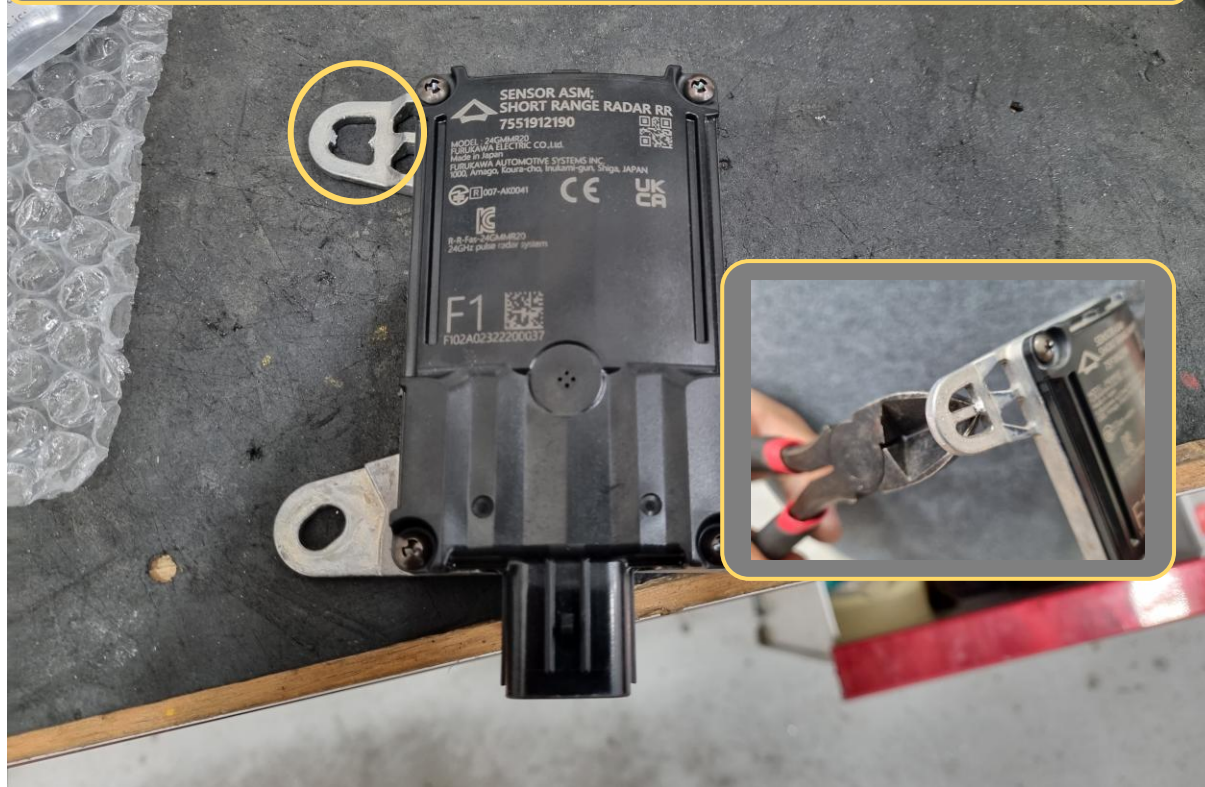
It is advised to clamp the radar on one of the other tabs. **Take care not to damage any plastic parts of the radar sensor.**

40. Deburr/file after cutting.

TOOLS REQUIRED

Angle grinder
Deburr tool or metal file

FASTENERS

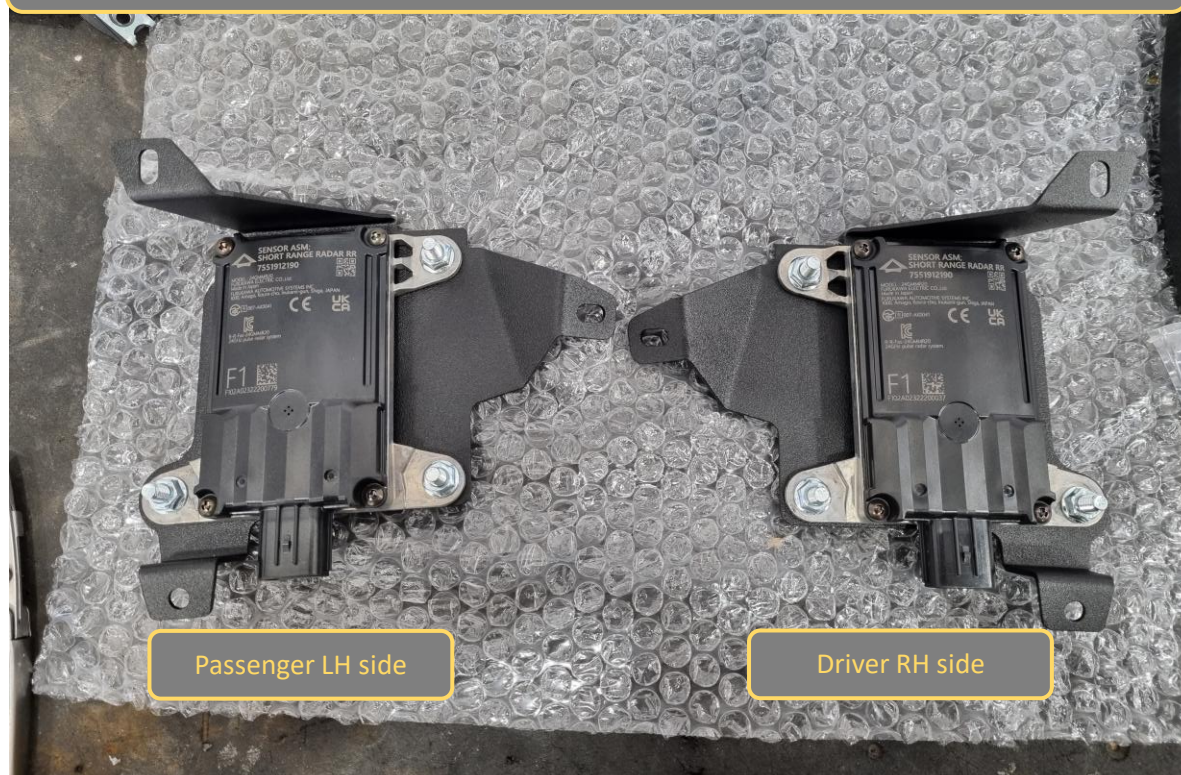
UPDATED RADAR ON 2023+ ISUZU D-MAX ONLY

41. For the driver side RH radar sensor, also cut out the webbing in the top left tab. This can be done with a pair of side cutters.

TOOLS REQUIRED

Side cutters

FASTENERS

UPDATED RADAR ON 2023+ ISUZU D-MAX ONLY

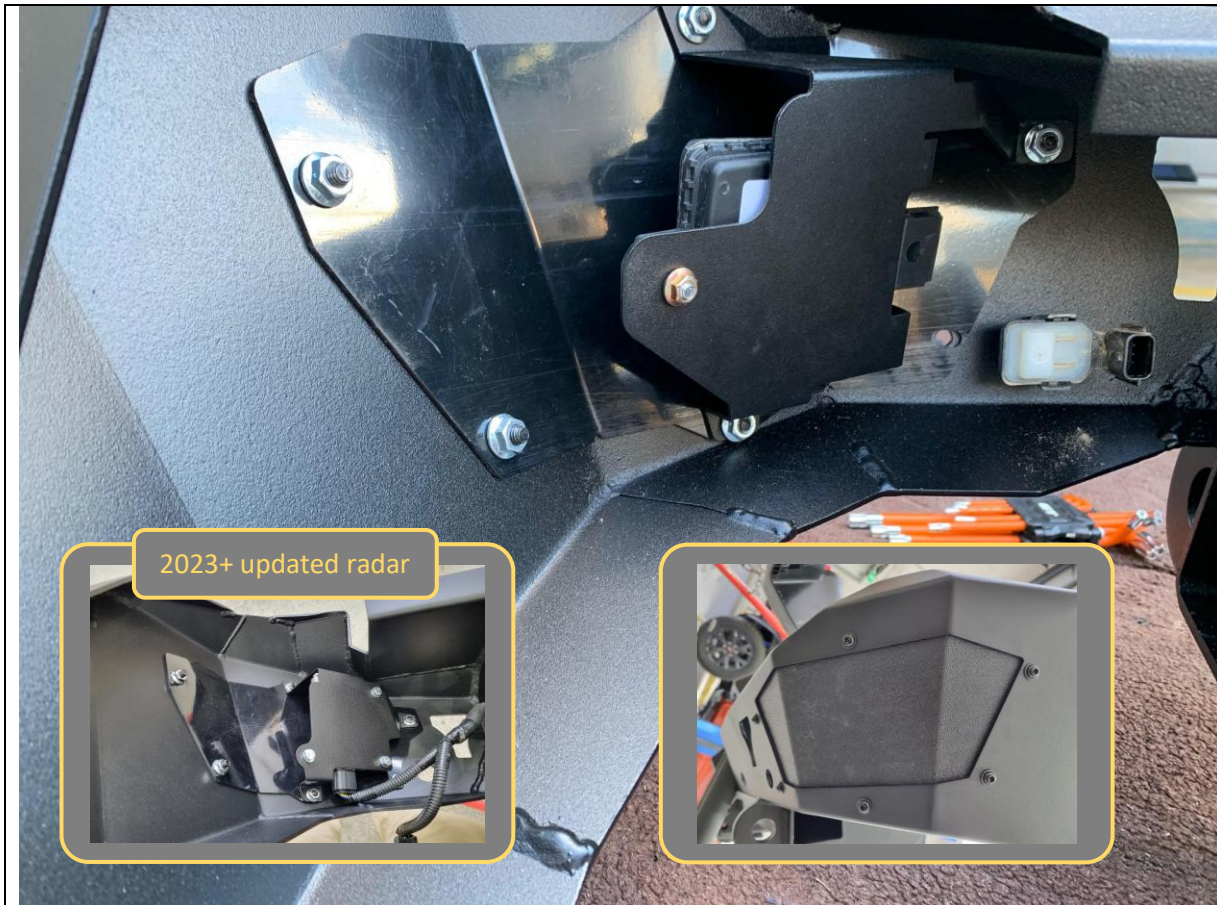
42. Re-fit the radar sensors to the supplementary radar brackets using M6x16 hex bolts, flat washers and flange nuts.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

6x M6x16 hex head bolt
6x M6 flat washer
6x M6 flange nut



43. Plug in radar harness connector to radar sensor.
44. Fit the radar sensor bracket, and plastic cover panel to the corner window of the bar and secure with M6x16 Button head, Flat washers, and Flange Nuts.
45. The radar bracket sits behind the plastic cover and shares the same fasteners.
46. Complete for both sides of vehicle.

TOOLS REQUIRED

4mm Hex key

FASTENERS

6xM6x16 Black BHCS
6x M6 Black Washers
6x M6 Flange Nuts



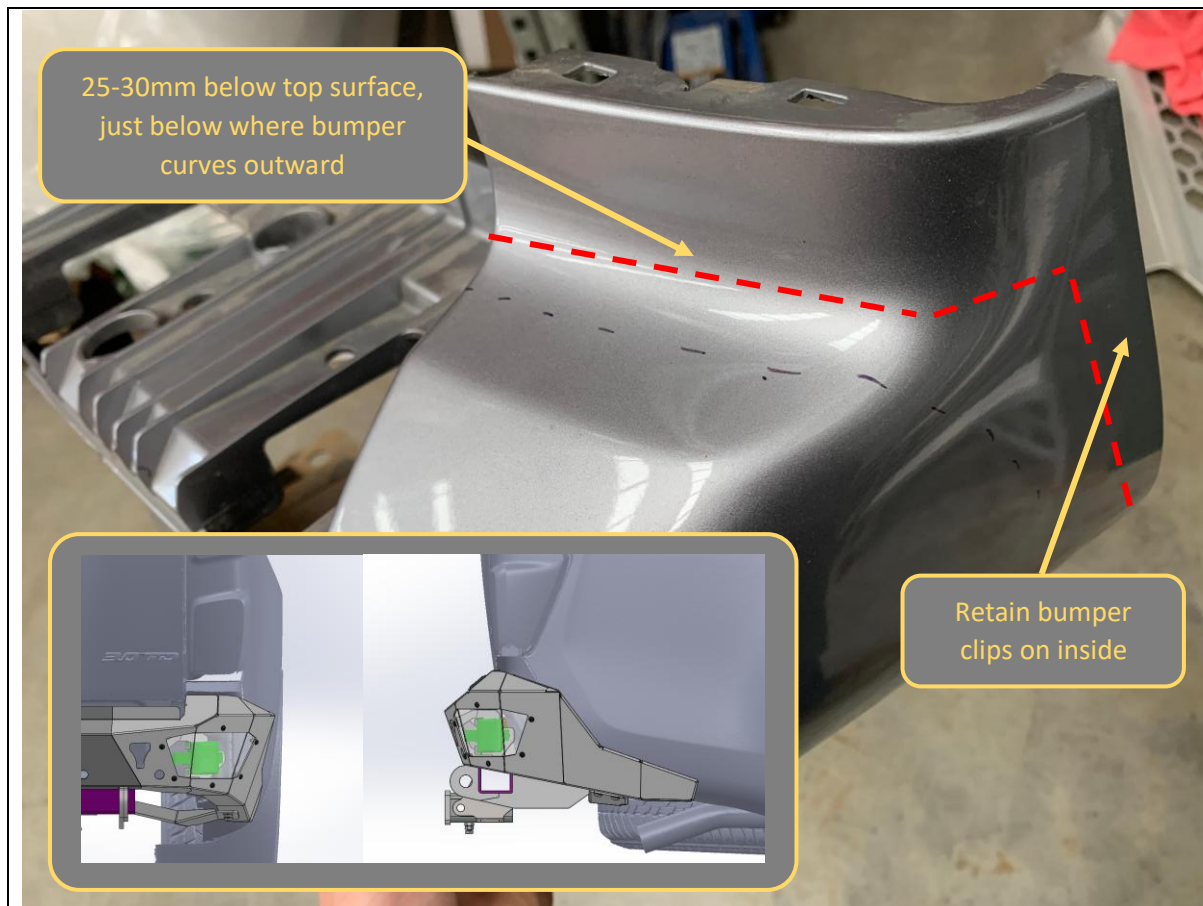
47. Fit rubber pinch weld to edges of wing, in the location shown by pushing rubber over the edge.
48. Complete for both sides of vehicle.
49. Re fit Number Plate to rear bar, using supplied M5 fasteners.

TOOLS REQUIRED

Phillips Screwdriver

FASTENERS

4x M5x15 pan head
4x M5 flange nut



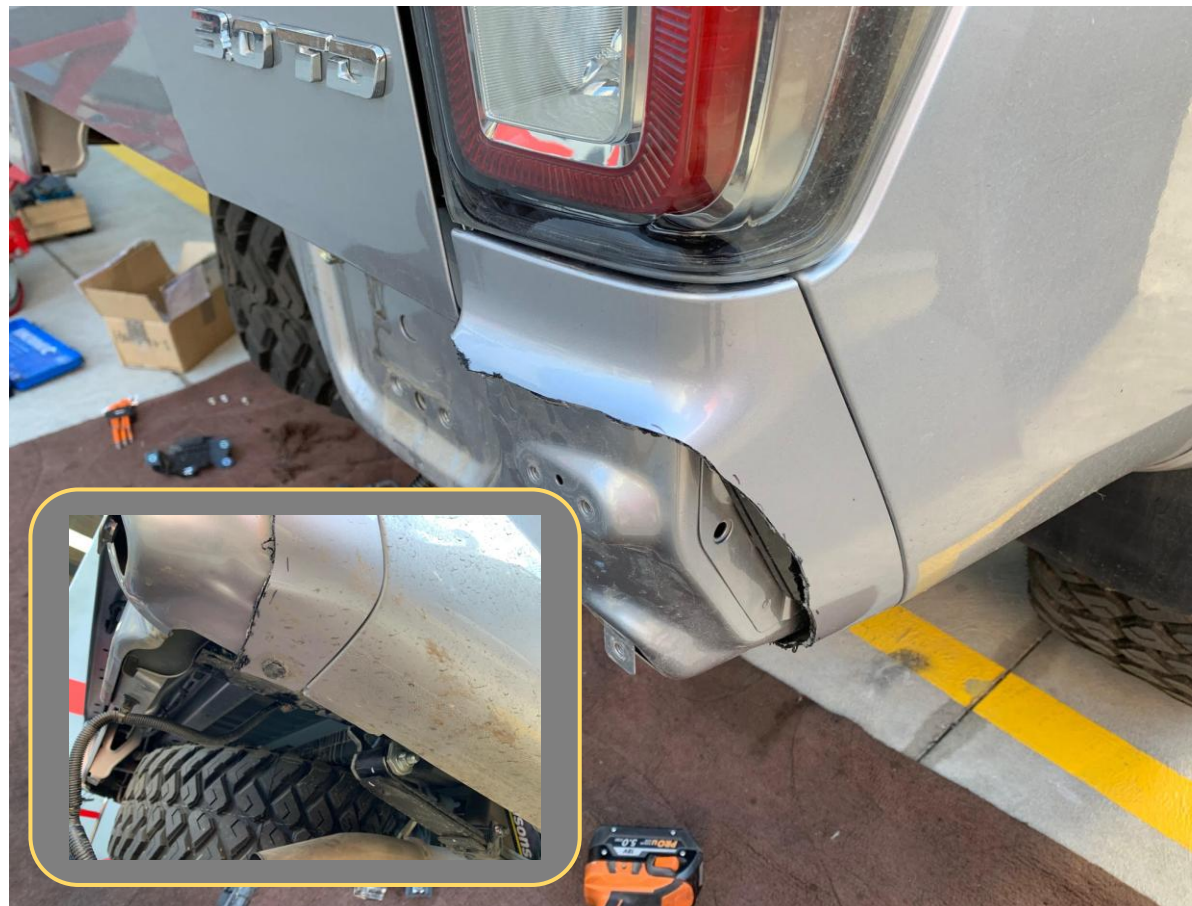
50. Mark location of bumper cut onto colored outer portion of bumper as shown in image.

51. The exact location of the cut is not critical provided it is below the location the bar will sit as shown in inset image.

TOOLS REQUIRED

Marker

FASTENERS

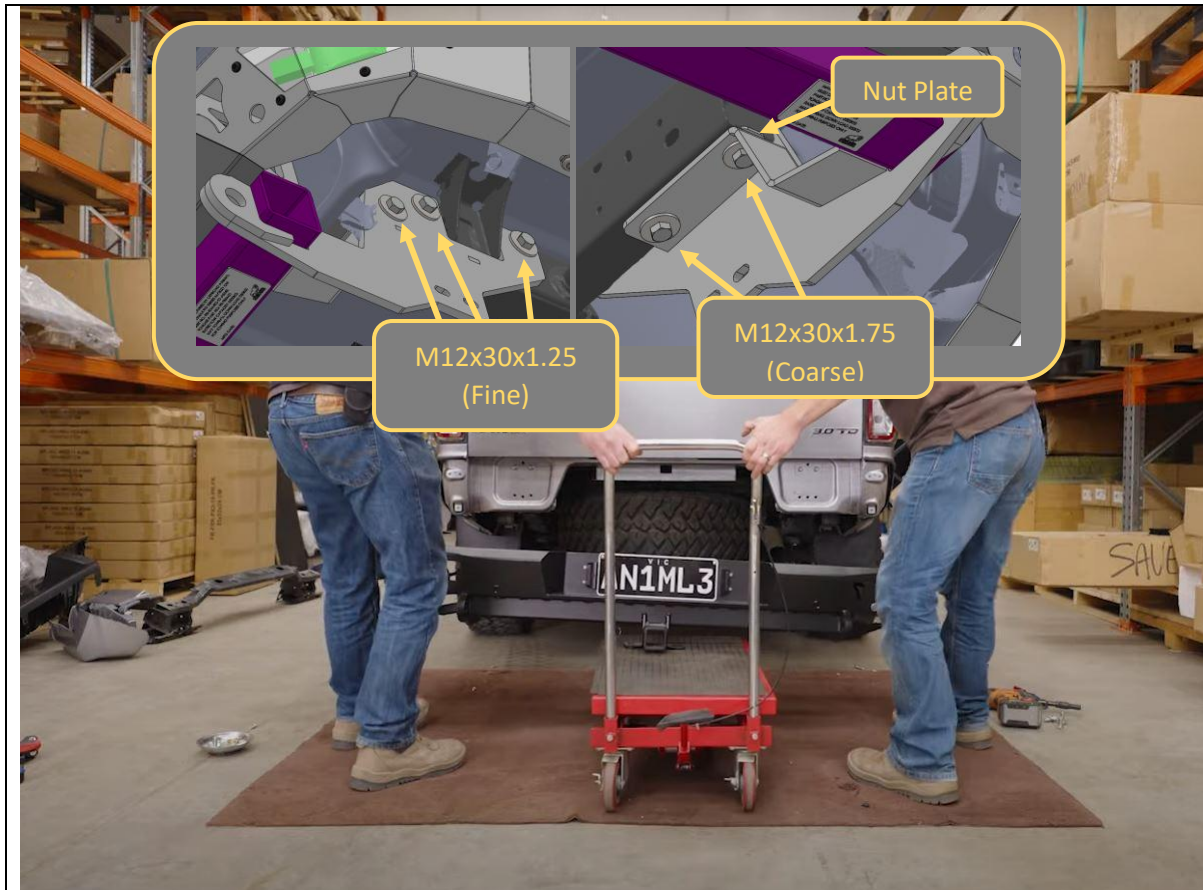


52. Trim along the line marked using air hacksaw or reciprocating saw.
53. Re fit trimmed bumper portion using clips under light and plastic clip, on the bottom corner as removed earlier.

TOOLS REQUIRED

Air Hacksaw / Reciprocating Saw

FASTENERS



54. With assistance, from a lift trolley or another person, lift the rear bar onto the car.
55. Secure to side of chassis using 3xM12x30x1.25 Bolts, and M12 Large Flat Washers into captive chassis nuts
56. Secure to Bottom of chassis nuts using 2xM12x30x1.75 Bolts into the supplied Nut Plate (insert through open end of chassis rail)

TOOLS REQUIRED

18mm Socket / Spanner

FASTENERS

2xM12x30x1.75 Bolts
3xM12x30x1.25 Bolts
M12 Nut Plate
5x M12 Flat Washer

Per side



57. Fit tub protection brace to the upright using 2x M10x30 Hex Bolts, flat washers, and M10 Flange nuts.

58. Secure to wing using 2x M10x20 Button head bolts, flat washers, and M10 Flange nuts.

59. Repeat for other side of vehicle.

TOOLS REQUIRED

16mm Socket / 15mm Spanner

6mm Hex wrench

FASTENERS


2x M10x30 Hex Bolts

2x M10x20 Button Head Bolts

4xM10 Flange Nut

4xM10 Flat Washer

Per side

	
<p>60. Secure trailer plug to bracket on vehicle using M5 Screw and Flange Nut provided</p> <p>61. Secure the loom using cable ties as required.</p> <p>62. Re connect the sensor and number plate lamp harness connectors</p>	<p>TOOLS REQUIRED</p> <p>8mm socket / spanner Phillips head screwdriver Cable Ties</p>
	<p>FASTENERS</p> <p>2x M5 Phillips head screw 2xM5 Flange nut.</p>



63. Fit M10x25 Hex bolt and M10 Nut to anti rattle location on bottom of Hitch Box

64. Replace Trailer Ball Mount and secure with Pull Pin and R Clip.

65. Attach Offroad Animal Logo plate to chamfered face, using attached adhesive backing.

66. Fit towbar Compliance plate to underside of crossbar, using attached adhesive backing.

67. With that you are done!

TOOLS REQUIRED

FASTENERS

Pull Pin
R-Clip
M10x25 Bolt
M10 Nut



Congratulations!
Head for the tracks and enjoy your newly protected DMAX!